

STUPEL, F. A.

USSR/Electricity Electric Power Publications

Apr 49

"New Books on Power Engineering" 1 p

"Elek Stants" No 4

Brief reviews include: N. K. Bodashkev's "Breakdowns in Stream Turbines and Their Prevention," G. K. Zherbe's "Testing Asynchronous Motors After Repairs," T. A. Zikeyev and A. I. Karelin's "Analysis of Power Fuels," "Installation and Operation of High-Pressure Boilers," edited by S. Ts. Fayerman and S. M. Shukher, "Handbook on Electrical Insulation," edited by Yu. V. Koritskiy and B. M. Tareyev, and F. A. Stupel's "Automatic and Protective Relays."

PA 55/49T27

8(2)

PHASE I BOOK EXPLOITATION

SOV/2362

Stupel', Fayvel' Aronovich

Elektromekhanicheskiye rele; osnovy teorii, proyektironaniya i rascheta. Uchebnoye posobiye (Electromechanical Relays; Principles of Theory, Design and Calculation. A Textbook.) 2nd ed. Kharkov, Izd-vo Khar'kovskogo univ-ta, 1956. 354 p. 20,000 copies printed.

Resp. Ed.: I. L. Baru, Professor; Ed.: D. A. Vaynberg; Tech. Ed.: Ya. T. Charnyshenko.

PURPOSE: This is a textbook on the theory of relays. It may be used by electrical-engineering students working on term and diplomal design projects. It may also be useful to engineering personnel engaged in the design and application of relays and contact mechanisms.

Card 1/16

VASHURA, B.F.; ~~STURTEL~~ J.A.; SHTURMAN, G.I.; BERGER, A.Ya.; LYUTER,  
R.A.; YEREMEYEV, A.S.

Professor O.B. Bron. Elektrichestvo no.5:94 My '56. (MLRA 9:8)  
(Bron, Osip Borisovich, 1896-)

ALEKSANDROV, A.G., dots; ARONOVICH, I.S., inzh.; BABIKOV, M.A., doktor tekhn.nauk; BATUSOV, S.V., kand.tekhn.nauk; BEL'KIND, L.D., doktor tekhn.nauk; VENIKOV, V.A., doktor tekhn.nauk; VESELOVSKIY, O.N., kand.tekhn.nauk; GOLOVAN, A.T., doktor tekhn.nauk; GOLUBTSOVA, V.A., doktor tekhn.nauk; GREYNER, L.K., inzh.; GRUDINSKIY, P.G., prof.; GUSEV, S.A., inzh.; DMOKHOVSKAYA, L.F., kand.tekhn.nauk; DROZDOV, N.G., doktor tekhn.nauk; IVANOV, A.P., doktor tekhn.nauk [deceased]; KAGANOV, I.L., doktor tekhn.nauk; KERBER, L.L., inzh.; KOCHENOVA, A.I., kand.tekhn.nauk.; LARIONOV, A.N.; MINOV, D.K., doktor tekhn.nauk; NETUSHIL, A.V., doktor tekhn.nauk; NIKULIN, N.V., kand.tekhn.nauk; NILINDER, R.A., prof.; PANTYUSHIN, V.S., prof.; PASYNKOV, V.V., doktor tekhn.nauk; PETROV, G.N., doktor tekhn.nauk; POLIVANOV, K.M., doktor tekhn.nauk; PRIVEZENTSEV, V.A., doktor tekhn.nauk; RADUNSKIY, L.D., inzh.; RENNE, V.T., doktor tekhn.nauk; SVENCHANSKIY, A.D., doktor tekhn.nauk; SOLOV'YEV, I.I., doktor tekhn.nauk; STUPEL' F.A., kand.tekhn.nauk; TALITSKIY, A.V., prof.; TEMNIKOV, F.Ye., kand.tekhn.nauk; FEDOROV, L.I., inzh.; FEDOSEYEV, A.M., doktor tekhn.nauk; KHOLYAVSKIY, G.B., inzh.; CHECHET, Yu.S., doktor tekhn.nauk; SHNEYBERG, Ya.A., kand.tekhn.nauk; SHUMILOVSKIY, N.N., doktor tekhn.nauk; ANTIK, I.B., red.; MEDVEDEV, L.Ya., tekhn.red.

[The history of power engineering in the U.S.S.R. in three volumes]  
Istoriia energeticheskoi tekhniki SSSR v trekh tomakh. Moskva, Gos. energ. izd-vo.

(Continued on next card)

ALEKSANDROV, A.G.--(continued) Card 2.

Vol.2. [Electric engineering] Elektrotehnika. Avtorskii kollektiv  
toma: Aleksandrov i dr. 1957. 727 p. (MIRA 11:2)

1. Moscow, Moskovskiy energeticheskiy institut. 2. Chlen-korrespon-  
dent AN SSSR (for Larionov)  
(Electric engineering)

STUPEL', F.A., kandidat tekhnicheskikh nauk; BELYI, I.V., inzhener.

Superfast acting protection devices. Vest. elektroprom. 28 no.3:14-17  
Mr '57. (MIRA 10:4)

1. Khar'kovskiy politekhnicheskii institut.  
(Electric relays)

8(2)

PHASE I BOOK EXPLOITATION

SOV/1908

Stupel', Fayvel' Aronovich

Induktivnyye i induktsionnyye preobrazovateli mekhanicheskikh velichin; ustroystvo, skhemy, raschet (Inductance and Induction Transducers of Mechanical Quantities; Construction, Circuits, Calculation) Kharkov, Izd-vo Khar'kovskogo univ., 1958. 102 p. Errata slip inserted. 5,000 copies printed.

Resp. Ed.: A.P. Sukachev, Docent; Ed.: D.A. Vaynberg; Tech. Ed.: Ya.T. Chernyshenko

PURPOSE: The book is intended for students of electrical engineering and for engineers and technicians working in automatic and remote control.

COVERAGE: The author discusses problems relating to the theory, construction of circuits, and methods of calculating the parameters of transducers converting mechanical quantities into electrical quantities used in systems of automatic and remote control. No personalities are mentioned. There are 19 references: 16 Soviet, 1 English, and 2 German.

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Inductance and Induction Transducers (Cont.)

SOV/1908

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1. Supply sources	68
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SOV/144-58-9-18/18

Inter-University Scientific Conference on Electric Measuring  
Instruments and Technical Means of Automation

they can be applied in discrete operation automation  
equipment.

Professor A. V. Fateyev (Leningrad Electro-Technical  
Institute imeni V. I. Ul'yanov (Lenin)) read the paper  
"Present state and prospects in the development of  
the theory and technique of automatic control",  
reviewing present trends in the theory of automatic  
regulation, development of the theory of linear systems  
of automatic control and giving an outline of the present  
state of the theory of non-linear systems, systems of  
optimizing control, self-setting systems and impulse  
control systems.

Docent F. A. Stupel' (Khar'kov Polytechnical Institute)  
in his paper "Present-day designs of an electro-  
magnetic automation mechanisms" outlined the character-  
istics of individual types of electro-magnetic mechanisms  
and the main trends in the design of electro-magnetic  
contactors, relays, polarized relays, fast electro-  
magnets, electro-magnetic couplings and special electro-  
magnetic mechanisms for programme control.

Card 2/13

KALUZHNIKOV, Nikolay Anatol'yevich; IVAKHNEKO, A.G., prof., retsenzent;  
BENIN, V.L., dotsent, retsenzent; STUPEL', F.A., dotsent,  
retsenzent; SUKACHEV, A.P., dotsent, otv.red.; DEREVYANCHENKO,  
R.M., red.; NIKULINA, N.I., tekhred.

[Designing of magnetic amplifiers] Raschet magnitnykh usili-  
telei. Khar'kov, Izd-vo Khar'kovskogo gos.univ. im. A.M.Gor'kogo,  
1960. 352 p. (MIRA 14:4)  
(Magnetic amplifiers)

BABAKOV, N.A.; BEON, O.B.; KORITSKIY, A.V.; SAKHAROV, P.V.; SOTSKOV, B.S.;  
STUFEL', F.A.; TSYPKIN, Ya.Z.

Seventieth anniversary of the birth of professor B.F.Vashura.  
Elektrichestvo no.9:96 S '60. (MIRA 13:10)  
(Vashura, Boris Fedorovich, 1890-)

STUPEL', Fayvel' Aronovich; AGEYKIN, D.I., red.

[Electromechanical pickups and transformers of non-electrical quantities; principle of operation, networks, and design] Elektromekhanicheskie datchiki i preobrazovatel'nye nelinektricheskikh velichin; printsip deistviia, skhemy, raschet. Moskva, Energiia, 1965. 115 p. (Biblioteka po avtomatike, no.141) (MIRA 18:7)

BYDEROVSKIY, S.I.; STUFEL', R.O.

The EPS-5,5 unit. Trudy TSNIIPodzemshakhtstroia no.3:12-22 '64.  
(MIRA 18:9)

BYDEROVSKIY, S.I., inzh.; STUPEL', R.O., inzh.

New mining grader. Shakht. stroi. 7 no.7:31-32 J1 '63.  
(MIRA 16:10)

1. Tsentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy  
institut podzemnogo i shakhtnogo stroitel'stva.

BYDEROVSKIY S.I., inzh.; STUPEL', R.O., inzh.

Large load hoisting buckets. Shakht.stroi. 8 no.3:16-17 Mr '64.  
(MIRA 17:3)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktor-  
skiy institut podzemnogo i shakhtnogo stroitel'stva.

137-58-4-7203

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 4, p 126 (USSR)

AUTHORS: Rudoy, V. S., Shevchenko, A. A., Pishchikov, G. P., Belokurov, S. I., Stupel', S. I., Patlan', Ye. F., Chernyavskiy, A. A., Kholyavko, Z. I.

TITLE: Effect of External Defects in Steel Ingots on the Quality of Tubes Rolled on Pilger Mills (Vliyaniye naruzhnykh porokov stal'nykh slitkov na kachestvo trub, prokatyvayemykh na pilgrimovykh ustanovkakh)

PERIODICAL: Byul. nauchno-tekhn. inform. Vses. n.-i. trubnyy in-t, 1957, Nr 3, pp 26-34

ABSTRACT: An investigation was made of ingots (I) of Nr 4 steel, 230 and 305 mm in diameter, exhibiting surface defects such as longitudinal cracks, twist, banding, and nonmetallic superficial inclusions. It was found that the rolling of I with cracks still present leads to the formation of scab on barrels (B) and tubes (T). Twists on I lead to the formation of through cracks or deep scab on B. The rolling of I having longitudinal cracks leads to the formation of shallow scabbing on B and T. The presence of banding results in the formation of fine transverse scab which burns out and be-

Card 1/2



STUPEL, S.I.

STUPEL S.I.

807/1574

PLATE I BOOK EXPLANATION

18(5); 82(5)

Ryiv. Ukrayin's'kyi naukovy-doslidnyy instytut metally  
Vprovadzhennya novoyi tekhnolohiyi u metalurhiyu (Ukrainian Institute for the Introduction of New Technologies and Techniques in Metallurgy); No. 3 (Introduction of New Technologies and Techniques in Metallurgy); Collection of Articles, Vol. 3) Kyiv, Derzhavnyi DSD, 1978. 192 p. 1,000 copies printed.

Rev. M.: R. Armas; Tech. M.: P. Petalynuk.

REMARK: The book is intended for metallurgists employed in rolling and slabbing operations.

COVERAGE: This is a collection of 11 Ukrainian articles, compiled by 22 authors, some of whom are referred to as machine specialists. The subjects dealt with in the articles are: use of limestone-fluxed slag in making pig iron, use of blast-furnace gas under blast-furnace, description of a new method of "intensified" sequence of slabs in blooming mills. Some design details, with direct references to actual plants and certain operational practices are also featured. Introduction of full mechanism of rolling processes at steel-works is taking place. Numerous diagrams accompany the text. Some articles have bibliographic entries, mainly Soviet.

SUMMARY OF CONTENTS:

Introduction of New Techniques (cont.)

807/1574

Prichurov, S.I., Ye. I. Penikvel, S.M. Zaykov, P.Ye. Kravtsov, and S.I. Stupel. Use of Calcium-Silicon in the Decarburization of Steel for Making Steels and Castings 87

Lov, B.F.; G.A. Krasnaya, and S.S. Sankovskiy. Effect of Remelted Cast Iron on Some Properties of Bessemer Steel, Decarburized by Calcium-Silicon 98

Alchukov, P.A., V.V. Klyusha, and Ye. Ryazukh. Ways of Increasing the Durability and Wear-Resistance of Mills in Rolling Mills 103

Belashov, P.Ye. Unusual Possibilities of Augmenting the Performance of Small-roll Slabbing Mills Working Large-size Slabs 117

Pallov, I.F. Steel Rolling According to Technological Performance Charts; Compilation of Charts 140

Card 3/9

LAPITSKIY, V.I., doktor tekhn.nauk, prof.; STUPAR', N.I., dotsent;  
STUPEL', S.I., inzh.; TARAPAY, M.A., inzh.; TIMOFEYEV, V.L., inzh.;  
YAKOVLEV, Yu.N., inzh.

Certain problems in the preparation of steel ingots for wheels.  
Izv. vys. ucheb. zav.; chern.met. no.5:21-28 My '58. (MIRA 11:7)

1.Dnepropetrovskiy metallurgicheskiy institut i zavod im. K.  
Libknekhta.

(Steel ingots)

Stupalis

KIBARSKIS, Kh., dotsent: STUPALIS, J.

Alkaloids from the Rauwolfia serpentina group for treating  
hypertension. Vrach. delo no.1:35-37 Ja '57 (MLRA 10:4)

1. Klinika gospiatal'noy terapii (zav. kafedroy-L.E. Lautsevichus)  
Vil'nyusskogo universiteta na baze Pervoy Sovetskoy klinicheskoy  
bol'nitsy.  
(HYPERTENSION) (RAUWOLFIA SERPENTINA)

LAUTSEVICHUS, L.Z., dotsent; STUPALIS, I.G. (Vil'nyus)

Ethyl chloride blockade in the treatment of cerebral hypertension.  
Klin.med. 35 no.6:119-122 Je '57. (MIRA 10:8)

1. Iz kliniki gospiatal'nyy terapii (zav. - dotsent L.Z.Lautsevichus)  
Vil'nyusskogo universiteta imeni V.Kapsukasa na baze 1-y Sovetskoy  
klinicheskoy bol'nitsy g. Vil'nyusa (glavnyy vrach I.T.Yeliseyev)  
(HYPERTENSION, ther.

ethyl chloride blockade in cerebral hypertension)  
(ETHYL CHLORIDE, ther. use  
blockade in cerebral hypertension)

STUPELIS, I.G.

KIBARSKIS, Kh.Kh.; STUPELIS, I.G.

Rauwolfia serpentina preparations in the compound treatment of hypertension. Sov.med.22 no.1:82-89 Ja '58. (MIRA 11:4)

1. Iz kafedry gosital'noy terapii (zav. - dotsent D.Z.Lautsevi-  
chus) Vil'nyusskogo universiteta imeni V.Kapsukasa ba baze 1-y  
sovetskoy klinicheskoy bol'nitsy Vil'nyusa (glavnyy vrech I.T.  
Yeliseyev)

(RAUWOLFIA ALKALOIDS, ther. use  
serpentina prep. in combined ther. of hypertension  
(Rus))

(HYPERTENSION, ther.  
Rauwolfia serpentina prep. in combined ther. (Rus))

STUPELIS, I. G. Cand Med Sci @- "Use of Rauwolfia serpentina preparations in *the*  
complex treatment of hypertension patients." Vil'nyus, 1960 (Min of Higher  
and Secondary Specialized Education USSR. Vil'nyus State Univ im V. Kapsukas)  
(KL, 4-61, 211)

-381-

USSR/Organic Chemistry - Theoretical and General Questions on Organic Chemistry, E-1

Abst Journal: Referat Zhur - Khimiya, No 1, 1957, 769

Abstract: completely unrelated to the rate of the oxidizing action; this can be explained by the fact that different mechanisms apply to the 2 processes. Titration was carried out in ethylchloride solution acidified with glacial  $\text{CH}_3\text{COOH}$ .



III R =  $\text{CH}_2$

IV R =  $\text{C}_2\text{H}_5$

Card 2/2

Stupen, L.V.

*Chem*  
 Oxidizing action of some acyl peroxides. L. V. Stupen, and E. S. Blazner. *Chem. Abstr.* 45, 2446. (1955).  
 The rate of oxidation of  $\text{C}_6\text{H}_5\text{C}(\text{OOAc})_2$  and  $\text{C}_6\text{H}_5\text{C}(\text{OOAc})_2$  was determined and the results are shown graphically. The reaction was run in  $\text{CH}_2\text{Cl}_2$  and  $\text{AcOH}$ . Reaction with  $\text{H}_2\text{O}_2$  and  $\text{AcOH}$  is complete in a few min. The reactions of  $\text{C}_6\text{H}_5\text{C}(\text{OOAc})_2$  with  $\text{H}_2\text{O}_2$  and the  $\text{C}_6\text{H}_5\text{C}(\text{OOAc})_2$  with  $\text{H}_2\text{O}_2$  are slower, requiring considerable time, with the latter being the slower to react of the two. Both  $\text{H}_2\text{O}_2$  and  $\text{H}_2\text{O}_2$  derive, initiate styrene polymerization.

0004

*W. J. ...*



Step 1. V.

1000

Oxidizing action of some acid peroxides. G. A.  
V. Gupen and K. S. Minaker. J. Gen.

3

LTH

STUPEN, L.V.

MINSKER, K.S.; STUPEN', L.V.

Initiating action of some acyclic peroxides. Zhur.ob.khim, 27  
no.10:2875-2877 0 '57. (MIRA 11:4)  
(Peroxides) (Catalysis)

76-12-11/27

AUTHORS: Tkachenko, G.V., Stanen', L.V., Kofman, L.P.,  
Frolova, L.Z.

TITLE: Common Polymerization of Vinyl Chloride With the Esters of Acrylic  
Acid (Sovmestnaya polimerizatsiya khloristogo vinila s efirami  
akrilovoy kisloty).

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1957, Vol. 31, Nr 12, pp. 2676-2681 (USSR)

ABSTRACT: M.M. Kucherenko (a woman), participated in the performance of some  
tests. A.D. Abkin and P.M. Khomikovskiy took part in the computation  
of the results. The common polymerization of vinyl chloride, as well  
as of methyl-, butyl-, and octylacrylates were investigated. It is  
shown that the velocity of common polymerization and the molecular  
weights of the developing polymers increase with the rise of acrylate  
content. It is further shown that the common polymers with all mo-  
nomer relations in the initial mixture are enriched by acrylate-com-  
ponents. The constants of common polymerization are computed from the  
data of the polymeric composition, viz. with methyl acrylate  $\alpha = 0.06$ ,  
 $\beta = 4.4$ , with n-butyl acrylate  $\alpha = 0.07$ ,  $\beta = 4.4$ , with n-octyl  
acrylate  $\alpha = 0.12$ ,  $\beta = 4.8$ .  $\alpha$  and  $\beta$  are the constants of common  
polymerization for the vinyl chloride  $\alpha$  and the investigated acry-  
late  $\beta$ . It is shown that the velocities of separated polymerization

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Common Polymerization of Vinyl Chloride With the Esters of  
Acrylic Acid

76-12-11/27

of the acrylates are essentially higher than those with vinyl chloride. The computation of the co-polymer-composition was carried out by taking the found constants of common polymerization into account. It is shown that the test data agree with those obtained by computation. The structure distribution in the macro-chain of the co-polymers was computed. It is shown that with an increase of the acrylate content in the monomer initial mixture, the structural part with the longer acrylate members increases substantially. The probability for the formation of an acrylate-acrylate-bond in the co-polymer amounts to approximately 0.7 with equimolecular mixtures of monomers. There are 3 figures, 5 tables, and 11 references, 6 of which are Slavic.

SUBMITTED: August 17, 1956  
AVAILABLE: Library of Congress  
Card 2/2

5(4), 15(9)

SOV/76-32-10-5/39

AUTHORS: Tkachenko, G. V., Stupen', L. V., Etlis, V. S., Kofman, L. P.

TITLE: Polymerization of the Chlorine Derivatives of Styrene and Their Copolymerization With Vinyl Chloride (Polimerizatsiya khlor-proizvodnykh stirola i ikh sovместnaya polimerizatsiya s khlordistym vinilom)

PERIODICAL: Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 10, pp 2251-2255 (USSR)

ABSTRACT: In the present paper the single polymerization of  $\beta,\beta$ -dichloro-styrene and  $\alpha,\beta,\beta$ -trichloro-styrene is investigated as well as their copolymerization with vinyl chloride. In some experiments L. A. Kracheva participated as well. The polymerizations took place in glass ampoules and in a steel autoclave. The technique of filling the ampoules was described in reference 9, whereas the polymerization velocity was measured dilatometrically according to reference 10. To determine the relative viscosity the balance according to V. A. Kargin was used (Ref 11). It was found that the substitution of the hydrogen atoms in the vinyl group of styrene leads to the fact that the monomer also in the presence of peroxides, azo compounds and some redox systems, as

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SOV/76-32-10-5/39

Polymerization of the Chlorine Derivatives of Styrene and Their Copolymerization With Vinyl Chloride

well as the Friedel-(Fridel) Krafts catalyst does not polymerize. This low reactivity is explained by steric hinderances. The higher reactivity of the radical of  $\alpha,\beta,\beta$ -trichloro-styrene, as well as the polarity of the molecule, leads to a more rapid copolymerization of this monomer with vinyl chloride than with styrene.  $\beta,\beta$ -dichloro-styrene polymerizes slowly according to the ionic mechanism with catalysts of the cation type to a small degree of transformation. It is assumed that in the copolymerization of vinyl chloride with  $\beta,\beta$ -dichloro- and  $\alpha,\beta,\beta$ -trichloro-styrene radicals with a low reactivity are formed, due to which fact the reaction velocity is decreased and the polymers obtained have a reduced molecular weight. An introduction of  $\alpha,\beta,\beta$ -trichloro-styrene into the chain of the polychloro-vinyl leads to a decrease of the transition temperature into the vitreous and viscous state, i. e. an internal plastification takes place. The authors thank V. A. Kargin, Member, Academy of Sciences, USSR; K. A. Kocheshkov, Corresponding Member, Academy of Sciences, USSR; A. D. Abkin; and P. M. Khomikovskiy. There are 2 figures and 13 references, 9 of which are Soviet.

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SOV/76-32-10-5/39

Polymerization of the Chlorine Derivatives of Styrene and Their Copolymerization  
With Vinyl Chloride

SUBMITTED: April 11, 1957

Card 3/3

15(9), 5(4)

SOV/76-32-11-5/32

AUTHORS:

Tkachenko, G. V., Stupen', L. V., Kofman, L. P., Karacheva, L. A.

TITLE:

The Copolymerization of Vinyl Chloride With Methacrylic Esters  
(Sovmestnaya polimerizatsiya khlorigo vinila s efirami metakrilovoy kisloty)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1958, Vol 32, Nr 11, pp 2492-2499  
(USSR)

ABSTRACT:

This paper is a continuation of previous investigations (Refs 1,2). Copolymers of the vinyl chloride (A) with methyl-(B), n-butyl-(C), and n-octylacrylate (D) were obtained and their composition and properties were determined. Some quantitative rules governing the reaction properties of the investigated acrylic and methacrylic esters were found. Corresponding data were also obtained for the copolymers of (A) with vinyl benzoate (E) (the latter was produced by V. S. Etlis, just as (D)). At a certain ratio of the components these products have better elasticity properties than polyvinyl chloride. The rate of polymerization was determined dilatometrically in a dichloroethane solution, and the heat effect on the mixed polymers of

Card 1/3



SOV/76-32-11-5/32

## The Copolymerization of Vinyl Chloride With Methacrylic Esters

a balance according to V. A. Kargin (Ref 6) was measured. The copolymerization constants were obtained graphically according to an equation by L. M. Gindin, A. D. Abkin and S. S. Medvedev (Ref 7). The copolymers of (A) with methacrylates are completely soluble in cyclohexane, in contrast to those with (E). The copolymerization velocity as well as the viscosity of the reaction products are considerably lower with methacrylates than with acrylates, which fact is explained by the effect of the methyl group in the  $\alpha$ -position. The copolymerization constants for (A) with (B, C, D, and E) obtained at 45° are the following:  $\alpha = 0.02$ ,  $\beta = 15$ ;  $\alpha = 0.05$ ,  $\beta = 13.5$ ;  $\alpha = 0.04$ ,  $\beta = 14.0$ ;  $\alpha = 0.72$  and  $\beta = 0.28$ . The fact that at (E)  $\beta < 1$  is explained by the difference of the electron density of the double bond C=C. The reactivities of (A) and (E) are rather close to each other, and the copolymerization yields rather homogeneous products which at a ratio of (A) : (E) = 0.72 : 0.28 form an azeotropic mixture. The macromolecules of the copolymers (A) with (B, C, D) mainly consist of long methacryl chains and short vinyl chloride chains. In the copolymerization products of (A) and (E) at equimolecular ratios an arranged distribution of the chains is observed; with an increase of the (A) amount the

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SOV/76-32-11-5/32

The Copolymerization of Vinyl Chloride With Methacrylic Esters

chains (A)-(A) are increased. The authors thank Professor A. D. Abkin and P. M. Khomikovskiy.  
There are 4 figures, 6 tables, and 9 references, 5 of which are Soviet.

SUBMITTED: April 11, 1957

Card 3/3

SOV/20-121-4-20/54

AUTHORS: Berlin, A. A., Stupen', L. V., Fedoseyeva, B. I.,  
Yanovskiy, P. M.

TITLE: An Investigation of the Initiated Copolymerization of Vinyl  
Chloride With Derivatives of the Methacryl Series (Issledo-  
vaniye privitoy sopolimerizatsii vinilkhlorida s proizvodnymi  
metakrilovogo ryada)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 4,  
pp. 644 - 647 (USSR)

ABSTRACT: If a monomer is polymerized in the presence of polymeric  
substances it is often subjected to the influence of the  
radicals of growing chains or of the initiator. In this  
connection it is possible that as a result of chain transfer  
active centers are formed on the macromolecules. These  
centers are able to initiate the polymerization of the  
monomer resulting in the formation of compounds of high  
molecular weight with a racemic or threedimensional structure.  
In case that the side ramifications are of different chemical  
nature than the main chain, inoculated copolymers form. They  
combine the properties of the polymers used for the reaction

Card 1/4

An Investigation of the Initiated Copolymerization  
of Vinyl Chloride With Derivatives of the Methacryl Series

SOV/20-121-4-20/54

(Refs 1-6). This paper gives experimental results on synthesis and investigation of the inoculated polymers which are formed by the polymerization of vinyl chloride in the latex of the copolymer of butyl methacrylate and methacrylic acid (henceforth both referred to as BMA). Further results are mentioned of those polymers forming by the polymerization of a butyl methacrylate- and methacrylic acid mixture in the polyvinyl chloride (PVCh) latex. As table 1 shows the Khaggin constants are higher in the case of inoculated polymers than in the case of linear control polymers. This fact points to a ramification due to the formation of side chains. The mentioned constants of the PVCh- and BMA mixtures are between the constants of individual polymers and are close to the additive values. More than 60% of the monomer enters the reaction with the polymer (coefficient  $f$ ). Furthermore the polymer solutions were turbidimetrically titrated in dioxane or in a mixture of dimethyl formamide with acetone. Figure 1 shows that a separate precipitation takes place when a mixture of polymers is titrated, whereas the curve of precipitation of polymerize sample of vinylchloride

Card 2/4

An Investigation of the Initiated Copolymerization of Vinyl Chloride With Derivatives of the Methacryl Series SOV/20-121-4-20/54

in the BMA latex refers to the existence of an inoculated copolymer. Table 2 shows that the increase of the amount of vinylchloride in the mixture of components elevates the yield-(utilization)coefficient  $\eta$ . The addition of a regulator ( $\text{CCl}_4$ ,  $\text{CH}_3\text{I}$ ) abruptly reduces the yield of the inoculated copolymer in consequence of the inactivation of a part of the macroradicals. At the end thermochemical properties and further details of production are mentioned. There are 4 figures, 2 tables, and 8 references, 6 of which are Soviet.

PRESENTED: April 3, 1958, by N.N.Semenov, Member, Academy of Sciences, USSR

SUBMITTED: April 1, 1958

Card 3/4

5(4), 15(8)  
AUTHORS:

SOV/76-33-1-5/45

Tkachenko, G. V., Etlis, V. S., Stupen', L. V., Kofman, L. P.

TITLE:

The Copolymerization of Vinyl Chloride With Styrene and Pentachloro Styrene (Sovmestnaya polimerizatsiya khloristogo vinila so stirolom i pentakhlorostirolom)

PERIODICAL:

Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 1, pp 25-31 (USSR)

ABSTRACT:

According to various publications (Refs 1-4) there is a considerable difference between the reactivity of styrene (I) and that of pentachloro styrene (II). It is assumed that a copolymerization of styrene with vinyl chloride (III) and styrene derivatives (due to the influence of the less reactive styrene derivatives) results in more homogeneous copolymers. The polymerization took place in the substance itself and in the emulsion (glass ampoules and 4 liter steel autoclave), as well as in dichloro-ethane solutions (in the dilatometer) (Refs 9,10). The velocities of the polymerizations of (III), (I), and (II) in dichloro-ethane solutions at 60° and monomer concentrations of 1.6 mol/l besides an initiating amount (dinitrile of the azoiso fatty acid) of 0.06 mol/l were: 0.0060, 0.0001 and 0.0036 mol/l.minute. In the case of a copolymerization of (III)

Card 1/3

SOV/76-33-1-5/45

## The Copolymerization of Vinyl Chloride With Styrene and Pentachloro Styrene

with (II), the function curve of the yield of polymers in dependence on the composition of the initial mixture with a content of 0.08-0.1 mole-parts of (II) passes through a minimum. Calculations based upon the results of the investigations (Table 3) resulted in the values  $\alpha = 0.045$  and  $\beta = 12.4$  for the constants of a copolymerization of (III) with (I), which agrees with Dook's (Dok) statements (Ref 3). The copolymerization of (III) with (II) takes place at a measurable velocity, i. e. slower than the copolymerization of (III) with (I). The reaction constants calculated from the equations (1) and (2) corresponding to a diagram (Fig 5) are given as follows:  $\alpha = 0.43$  and  $\beta = 5.3$ . The thermomechanical curves of copolymers obtained by the copolymerization of (III) with (II) containing more than 20% of (II) do not possess a range of high elasticity. Copolymers containing up to 10% of (II) do not differ from polyvinyl chloride as regards the temperature of transformation from highly elastic to viscous-liquid state. L. A. Karacheva participated in some of these experiments. The cooperation of A. D. Abkin and P. M. Khomikovskiy is appreciated. There are 5 figures, 3 tables, and 15 references, 8 of which are Soviet.

Card 2/3

SOV/76-33-1-5/45

The Copolymerization of Vinyl Chloride With Styrene and Pentachloro Styrene

SUBMITTED: May 17, 1957

Card 3/3



BERLIN, A.A.; STUPEN', L.V.; FEDOSEYEV, B.I.; YANOVSKIY, D.M.

Graft copolymerization. Part 6: Fractionation of the products  
from the graft polymerization of vinyl chloride with the  
butyl methacrylate-methacrylic acid copolymer. Vysokom.  
soed. 2 no.8:1227-1233 Ag '60. (MIRA 13:9)  
(Ethylene) (Methacrylic acid)

L 1157-66 EWT(m)/EPF(c)/ENP(j)/T RM

ACCESSION NR: AP5022008

UR/0286/65/000/014/0078/0078

678.74 : 66,097

AUTHOR: Razuvaev, G. A.; Shevlyakov, A. S.; Yanovskiy, D. M.; Kofman, L. P.;  
Stupen', L. V.; Pavlov, S. M.

TITLE: A method for polymerizing vinyl compounds. Class 39, No. 172994  
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 14, 1965, 78  
TOPIC TAGS: emulsion polymerization, vinyl plastic, polymerization initiator, polymer

ABSTRACT: This Author's Certificate introduces a method for polymerizing vinyl compounds. Polymerization time is reduced and polymer yield is increased by using alkyl or aryl esters of percarbonic acid as the initiator for block or emulsion polymerization.

ASSOCIATION: none

SUBMITTED: 12Jan57

ENCL: 00

SUB CODE: OG, MT

NO REF SOV: 000

OTHER: 000

Card 1/1

STUFICA, M.

Improving the conditions of textile engineers in the Soviet Union. p. 639.

(TEKSTIL. Vol. 6, No. 6, June 1957, Zagreb, Yugoslavia)

SO: Monthly List of East European Accessions (EIAL) Lc. Vol. 6, No. 10, October 1957. Uncl.

STUPICA, M.

Some problems of productivity in the textile industry. p. 388.  
(Nova Proizvođa. Vol. 7, no. 6, Feb. 1957, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) L8, Vol. 6, no. 7, July 1957, Uncl.

L 08395-67 EMT(m)/EMP(j)/EEP(t)/ETI LJP(c) RM/DS/JD/JG/RM  
ACC NRT AP6031791 (A) SOURCE CODE: UR/0364/66/002/007/0788/0790

AUTHOR: Misyuk, E. G.; Davtyan, O. K.; Stupichenko, R. N.; Kalyuzhnaya, Ye. A. 39  
B

ORG: Odessa State University imeni I. I. Mochnikov (Odesskiy gosudarstvennyy universitet)

TITLE: Study of semiconductor electrode catalysts. Part 4: Dependence of the nature of oxygen electrodes prepared from metals of variable valence on the nature of alkali metal promotor ions

SOURCE: Elektrokhimiya, v. 2, no. 7, 1966, 788-790

TOPIC TAGS: electrode potential, electric polarization, alkali metal oxide, transition metal oxide

ABSTRACT: Continuing their study of solid solutions formed by oxides of variable-valence metals ( $\text{NiO}$ ,  $\text{CuO}$ ,  $\text{CoO}$ ,  $\text{MnO}$ , etc.) with lithium oxide and used as oxygen electrodes, the authors investigated the system  $\text{L}^+ - \text{O}^{2-} - \text{M}^{n+}$ , where  $\text{L}^+$  is an alkali metal ion, in electrodes consisting of two-layer plates prepared by a metal-ceramic method. The electrodes were activated at  $450^\circ\text{C}$  with Li, Na, K and Cs oxides in hydrogen. The activity of the electrodes was determined with polarization curves, which showed the electrochemical activity to increase in the series Li, Na, K, Cs. The electrode activity was compared with the ionization potentials of the alkali metal atoms with which they were activated. At a polarization of 0.25 V, the electrode activity was found to

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UDC: 541.136

L 08395-67

ACC NR: AP6031791

be proportional to the reciprocal ionization potentials. It is noted that the electrodes studied are not corrosion-resistant, but the results obtained are of theoretical interest, since they may aid in elucidating the mechanism of current-generating processes on the oxygen electrode and in finding suitable catalysts for it. Orig. art. has: 2 figures.

SUB CODE: 07/ SUBM DATE: 01Feb65/ ORIG REF: 001

Card 2/2 ajs

STUPIN, A.A.

USSR/Electricity - Literature

Jun 51

"Review of L. M. Plotrevskiy and Ye. A. Pal's Book 'The Testing of Electric Machines, Part I. General, and The Testing of DC Machines,' "Ye. M. Kovarskiy, N. I. Murkes, A. A. Stupin, Engineers, Sci Res Inst, Min of Elec Ind USSR

"Elektrichestvo" No 6, pp 89,90

Reviewers consider recommendation of this book by the Min of Higher Educa as a manual for power engineering and elec engineering institutes a mistake in view of its many shortcomings, particularly the fact that only about 1/3 of the book's vol has a real bearing on the testing of machines. Published by Gosenergoizdat, 1949, 380 pp, R 14.00.

200725

STUPIN, A. A., Cand Tech Sci -- (diss) "Certain Problems of  
Designing Magnetic Intensifiers." [Mos], 1957. 12 pp (Sci  
Res Inst), 100 copies (KL, 48-57, 107)

- 41 -



110-6-14/24

AUTHOR: Stupin, A.A., Engineer.

TITLE: The design of magnetic amplifiers (transducers) with internal feedback with active and active-inductive loads beyond the rectifiers. (Raschet magnitykh usiliteley s vnutrenney obratnoy svyaz'yu pri aktivnoy i aktivno-induktivnoy nagruzkakh za vypryamitelyami.)

PERIODICAL: "Vestnik Elektropromyshlennosti" (Journal of the Electrical Industry) 1957, Vol. 28, No. 6, pp. 49-53 (U.S.S.R.).

ABSTRACT: At the present time the qualitative theory of transducers is being actively developed, by representing the magnetic characteristics by a series of straight lines. This theory can also serve as a good basis for quantitative calculation. The working process of a transducer working on an active load can be considered as a succession of time-intervals in which the amplifier chokes are not saturated and time-intervals in which one of the chokes is highly saturated. In the first case, the load current is small and so the voltage drop in the load is small and the choke takes almost the entire circuit voltage. In the second case because of the saturation of the chokes the flux in them does not change and the circuit voltage is almost all applied

Card 1/3

SOV/110-58-7-14/21

AUTHOR: Stupin, A.A., Candidate of Technical Sciences

TITLE: The design of magnetic amplifiers with alternating-current load.  
(O raschete magnitnykh usiliteley s nagruzkoy peremennogo toka)

PERIODICAL: Vestnik Elektromyshlennosti, 1958, Nr 7,  
pp 47-52. (USSR)

ABSTRACT: The method of designing magnetic amplifiers from effective values of current and voltage, using vectorial addition of the voltages on saturable chokes and loads, is now widely applied. This article makes the method more precise. The general case is considered of a circuit containing a source of sinusoidal e.m.f., a linear series resonant circuit and a non-linear inductance (see Fig 1). The only limiting condition of the non-linear inductance is that hysteresis is absent. Equations are then formulated for the fundamental and higher harmonics of current, and an equation is given for the power balance.

Card 1/4

SOV/110-58-7-14/21

The design of magnetic amplifiers with alternating-current load.

It is shown that because of the presence of losses due to higher current harmonics, the active component of the fundamental voltage harmonic on the non-linear inductance is not zero. This is because the inductance generates active power at higher harmonics and hence absorbs power at the fundamental frequency. To determine the law of addition of effective voltages in the circuit, the effective values are calculated on the active part of the load and on the sum of all reactive elements of the circuit. Even though the fundamental voltage on the choke is not in quadrature with the current, the effective values of voltage on all active and reactive elements of the circuit are in quadrature. Difficulties in designing the choke on the basis of the effective value of the voltage are explained. The error due to the form factor may be great. However, the errors involved in the common method of effective values are not

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SOV/110-58-7-14/21

The design of magnetic amplifiers with alternating-current load.

corresponding to Curves 3 and 6 of Fig 3. The characteristics were determined by measuring mean values of current and load. The agreement between calculations and experiment is good. The increased accuracy that can be obtained by the methods proposed is particularly important for resonant amplifiers with feedback. An analysis of operation of an amplifier based on characteristics of combined magnetisation in the presence of feedback was proposed by I.B. Negnevitskiy (Elektrichestvo, 1951, Nr 10). Analysis by this method shows that the entire characteristics of the amplifier, including the maximum power, depend on the shape of the load characteristic. There are 6 figures, and 3 references, all of which are Soviet.

Card 4/4

1. Magnetic amplifiers--Design

SOV/110-58-11-2/28

Special Features of the Design of an Amplidyne when an Inductive Load Beyond the Rectifiers has Shunt Capacitance.

The amplidyne circuit is given in Fig.1. The case is considered when one of the cores is saturated and an a.c. current impulse appears in its winding, charging the capacitance. The current and voltage wave-shapes are discussed with reference to Fig.2. Amplidynes having cores with rectangular hysteresis loop always operate with a voltage pause on the chokes. During the interval of unsaturation there is a drop in voltage on the capacitance, which discharges into the load. It is shown that the voltage on the capacitance has a saw-tooth wave-form. The region of applicability of the theory is then determined from the condition that the capacitance should be so great as not to discharge to zero during the pauses in the operating current. Voltage equations are written down and a relationship is determined between the duration of the operating current impulse and the load voltage. The results of the calculations are plotted in Fig.3 for particular values of several constants. Then expression (20) is derived, from which the load characteristic may be constructed provided that a further

Card 2/5

SOV/110-58-11-2/23

Special Features of the Design of an Amplidyne when an Inductive Load Beyond the Rectifiers has Shunt Capacitance.

constant is calculated from equation (21). These equations are complicated, particularly the latter. However, it is shown that the constant calculated from (21) may be considered as invariable. Careful tests made on two amplidynes, with different core thicknesses and different winding data but using stampings of the same shape made of permalloy, showed that the value of a constant can be chosen and that it does not depend on the parameters of load, no-load induction or field intensity, but only on the material and construction of the core. The constant is determined experimentally and then a convenient formula can be derived for calculation of the load characteristic; see equation (22). This is the equation of an ellipse. A convenient method of using the equation is then described. The load-shunting capacitance influences the shape of the load characteristics. Usually, the smaller the capacitance the better, but unless condition (5) is satisfied operation may be unstable. Apart from this, the amplidyne with capacit-

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SOV/110-58-11-2/28

Special Features of the Design of an Amplidyne when an Inductive Load Beyond the Rectifiers has Shunt Capacitance.

active load can be calculated by the usual methods. Calculated and experimental load characteristics for two values of capacitance are drawn in Fig.5. The experimental characteristics were obtained on an amplidyne with internal negative-feed-back and a permalloy core. A family of combined magnetisation characteristics taken on an amplidyne with internal negative-feed-back and differing from the first two amplifiers is seen in Fig.6. It had different windings and a core made of a different batch of permalloy. The characteristics of an amplidyne, constructed from points of intersection of load characteristics with families of curves, are plotted in Fig.7. Calculated and measured a.c. form-factors are represented in Fig.3. The experimental results show that the proposed design procedure gives satisfactory results. For a more fundamental design of an amplidyne with capacitative load beyond the rectifiers, a simultaneous calculation must be made of the dynamic partial hysteresis loop of the cycle when the voltage applied to the choke is

Card 4/5

STUPIN, A.K.

Book reviews. Mashinostroitel' no.10:46 0 '65. (MIRA 18:10)



STUPIN, A.K., red.; SMIRNOVA, G.V., tekhn.red.

[Catalog of spare parts for the D-265 motor grader] Katalog  
zapasnykh chastei avtogreidera D-265. Moskva, Gos.nauchno-  
tekhn.izd-vo mashinostroit.lit-ry, 1959. 95 p. (MIRA 13:1)

1. Tekhnicheskaya kontora "STROYTYAZHMASHZAPCHAST".  
(Road machinery--Equipment and supplies)

KULIKOV, Andrey Sergeyevich; LEVITSKII, V.S., dotsen . kand.tekhn.nauk,  
retsenzent; STUPIN, A.K., red.; KL'KIND, V.D., tekhn.red.

[Descriptive geometry applied to drawing, designing and projecting]  
Nachertatel'naya geometriia v primeneni k chercheniiu, konstrui-  
rovaniu i proektirovaniu. Moskva, Gos.nauchno-tekhn.izd-vo mashino-  
stroit.lit-ry, 1959. 323 p. (MIRA 12:12)  
(Geometry, Descriptive)

STUPIN, A.K.

AZARKH, D.N., inzh.; POPOVA, N.V.; MDNAKHOVA, L.P.; SITNOVA, A.N.;  
STUPIN, A.K., red.; TIKHANOV, A.Ya., tekhn.red.; UVAROVA,  
~~A.P., tekhn.red.~~

[Pumps; catalog-reference book] Nasosy; katalog-spravochnik.  
Izd.3. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry,  
1959. 551 p. (MIRA 13:2)

1. Moscow. Nauchno-issledovatel'skiy institut gidromashino-  
stroyeniya.  
(Pumping machinery)

KIRICHENKO, Vasilii Stepanovich, inzh.; FEYGEL'SON, B.Yu., kand.tekhn.  
nauk, retsenzent; SUDAKIN, Ya.A., red.inzh.; pri uchastii:  
PORVATOV, N.A., inzh.; KRASAVIN, D.P., inzh.; KOROBEYNIKOV, M.M.,  
inzh.; ROGOZHNIKIN, P.I., inzh.; YEVDOKIMOV, F.N., inzh.; ~~SEUDIN~~  
A.N., inzh.; ZVIAGIN, A.V., inzh.; SIROTIN, A.M., red.izd-va,  
inzh., EL'KIND, V.D., tekhn.red.

[Water-cooled chill molds] Vodoohlazhdaemye kokili. Moskva, Gos.  
nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1958. 95 p. (MIRA 11:12)  
(Molding (Founding))

STUPIN, A.N.

Reservoirs outside of riverbeds form the foundation for an overall utilization of water resources of the Azerbaijan S.S.R. Za  
tekh.prog. 3 no.12:32-35 D '63. (MIRA 17:2)

1. Azerbaydzhanskiy gosudarstvennyy institut po proyektirovaniyu  
vodokhozyaystvennogo stroitel'stva.

BUSHUYEV, V.P.; GUBIN, G.V.; GONCHARENKO, Yu.I.; KARMAZIN, V.I.;  
MARGULIS, V.S.; MITROV, V.A.; NIKOLAYENKO, N.O.; BOBRUSHKIN, L.G.;  
BUROV, A.I.; RYBAKOV, V.N.; SOSHIN, A.F.; TATSIYENKO, P.A.;  
TOVSTANOVSKIY, O.D.; YUROV, P.F.; Prinimali uchastiye:  
NIFAGINA, A.A.; CHERNYY, I.I.; GERSHOYG, Yu.G.; KOSTIKOV, A.G.;  
DOLGIKH, M.A.; MOVSKOVICH, S.A.; STUPIN, D.D.; NEVOYSA, G.G.

Magnetization roasting of Kerch ores in the experimental  
factory of Kamysh-Burun Combine. Gor. zhur. no.12:30-37  
D '62.

(MIRA 15:11)

1. Institut Mekhanobrchermet, Krivoy Rog (for Bushuyev,  
Gubin, Goncharenko, Karmazin, Margulis, Mitrov, Nikolayenko,  
Nifagina, Chernyy, Gershoyg, Kostikov). 2. Kamyshburunskiy  
zhelezorudnyy kombinat, Kerch' for Bobrushkin, Burov,  
Rybakov, Soshin, Tatsiyenko, Tovstankovskiy, Yurov, Dolgikh,  
M.A.; Movskovich, S.A.; Stupin, D.D.; Nevoysa).  
(Kerch Peninsula—Ore dressing)

(Iron ores)

STUPIN, D.M.

Some remarks on standard designs of pipe culverts. Transp.stroi.  
10 no.6:61 Je '60. (MIRA 13:7)

1. Nachal'nik Planovo-proizvodstvennogo otdela SMP-257 Pechorstroya.  
(Culverts)

MAKAROV, L.L.; STUPIN, D. Yu.

Activity coefficients of KI and RbI in their concentrated aqueous solutions at 25°. Zhur. fiz. khim. 35 no.3:605-609 Mr '61.

(MIRA 14:3)

1. Leningradskiy gosudarstvennyy universitet im. A.A. Andanova.  
(Potassium iodide) (Rubidium iodide)  
(Activity coefficients)



S/799/62/000/002/003/011

AUTHORS: Barilovskiy, V. L., Vagner, E. N., Glukhov, Yu. N., Datsko, A. V.,  
Stupin, E. F.

TITLE: Potential static trigger having a current key with back coupling through  
logical diode networks.

SOURCE: Akademiya nauk SSSR. Institut elektronnykh upravlyayushchikh mashin.  
Tsifrovaya tekhnika i vychislitel'nyye ustroystva. no. 2. 1962, 36-43.

TEXT: The paper presents a potential static trigger network utilizing a current  
key which serves for the making of systems of elements that are fairly fast-acting  
and are free, to a significant extent, of the shortcomings of other current-switching  
schemes which require the use of a large number of semiconductor triodes which  
must be fairly uniform in some of their parameters, such as the voltage between the  
emitter and the base of the open triode, the base current of the closed triode, and  
must have fairly elevated values of the current-amplification coefficient, also the  
unavoidable limitations to the scatter in the values of the resistances and of the sta-  
bility of the power supply. A circuit diagram of the trigger is shown. The outstand-  
ing characteristic of this current key (Author's Certificate no. 130240, entitled  
"Shaper-inverter") consists in the fact that the collector circuits of its triodes in-  
clude fairly high ohmic resistors and diodes which on the collectors of the triodes  
Card 1/2

LIPAKOV, A.N.; MEL'NIKOV, A.A.; STUPIN, G.G.; TKALENKO, A.P.;  
SHCHERBAKOV, M.I.; PETUKHOV, N.N., otv. red.;  
ABARBARCHUK, F.I., red.izd-va; OVSEYENKO, V.G., tekhn.red.

[Gyroflywheel mine locomotive] Shakhtnye inertsiionnye lo-  
komotivy. Moskva, Gosgortekizdat, 1963. 122 p.  
(MIRA 16:5)

(Mine railroads)

STUPIN, G. K.

"Udel'nyy ves i komponenty vesa tela u lits, zanimayushchikhsya fizkul'turoy i sportom."

& Ethnological Sciences,  
report submitted for 7th Intl Cong, Anthropological Sciences/, Moscow,  
3-10 Aug 64.

STUPIN, I.V. (Moskovskaya oblast', Zvenigorodskiy rayon, pos. Instituta  
imeni Mechnikova, '7, kv. 29)

Changes in the intraorganic lymph vessels of a dog testicle  
in relation to experimental changes in the function of this  
organ. Arkh. anat., gist. i embr. 48 no. 1: 57-69 Ja '65.

(MIRA 18:11)

1. Kafedra normal'noy anatomii cheloveka (zav.- chlen-korrespondent  
AMN SSSR prof. D.A. Zhdanov) 1-go Moskovskogo ordena Lenina  
meditsinskogo instituta imeni Sechenova. Submitted April 2, 1964.

STOIL, I.I., nzh.; ANTON, E.A.

Test collecting devices used in mining in the permafrost zone.  
MIRA 18:2 (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut volota i  
redkikh metallor, Magadan.

STUPIN, P.K., Inzh.; KOVAL', A.V.

Dedusting during boring with perforators on placers in the  
Northeast. Bor'ba s sil. 6:112-115 '64 (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zolota i  
redkikh metallov, Nasedan.

L-27606-65 ENT(m)/EPF(n)-2/ENP(t)/EMP(b) Pu-4 IJP(c) ES/JD/WN/JG

ACCESSION NR: AP5001641

S/0186/64/006/006/0646/0651

AUTHOR: Fedorova, L. A.; Stupin, N. P.; Laskorin, B. N.

32  
20 B

TITLE: Study of the extractive properties of polyisobutyl-vinylphosphonate

SOURCE: Radiokhimiya, v. 6, no. 6, 1964, 646-651

TOPIC TAGS: <sup>27</sup>uranium extraction, <sup>R</sup>uranyl nitrate, isobutyl vinylphosphonate polymer, infrared spectrum, uranyl complex

ABSTRACT: The authors studied the extraction of uranium from nitric acid solutions with an isobutyl phosphonate polymer, using infrared spectroscopy. A shift in the frequency of the stretching vibrations of the  $P=O$  group ( $\Delta \nu = -50 \text{ cm}^{-1}$ ) was observed in the spectrum taken when a 10 M nitric acid solution was used, and the appearance of molecular vibrations of  $HNO_3$  was established. A frequency shift in the stretching vibrations of  $P=O$ , equal to  $80 \text{ cm}^{-1}$ , was found in the infrared spectrum of the organic phase when uranium was extracted from a 1 M nitric acid solution, indicating the coordination of the metal being extracted around this group. This spectrum also showed the characteristic frequencies of the covalently bound  $-O-NO_2$  group. The data obtained show that the extraction of undissociated uranyl nitrate can be performed with the isobutyl vinylphosphonate

Card 1/2

L 27606-65

ACCESSION NR: AP5001641

polymer at a distribution coefficient of 0.2 (1 g of polymer in 100 ml of  $\text{CCl}_4$ ) and a ratio of  $\text{UO}_2(\text{NO}_3)_2$  to the extracting agent of 1:2. Orig. art. has: 6 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 29Jun64

NO REF SOV: 007

ENCL: 00

SUB CODE: IC

OTHER: 005

Card 2/2



KRASHENNIKOV, V.G.; STUPIN, O.K.

Annual transport planning and the operations of the fleet sailings  
in foreign waters. Trudy TSNIIMF no.29:112-121 '60. (MIRA 15:11)

(Shipping--Accounting)

STUPIN, O.K.

Standard methods of planning operational expenditures.  
Trudy TSNIIMF no.48:42-51 '63. (MIRA 16:8)

STUPIN, O.K., inzh.

Indices of the economic efficiency of capital investments.  
Sudostroenie 30 no.5:47-48 My '64. (MIRA 17:6)

STUPIN, C.K.

Scientific efficacy of capital investments in heavy-tonnage  
machines. *Trudy Tekhn. No. 56:76-83* 1974.

(KIRA 17.11)

STUPIN, P., brigadir slesarey

Unit for testing suspension lines. Na stroi. Ros. no.7:13 J1 '61.  
(MIRA 14:8)

1. Avtobaza upravleniya stroitel'stva i promyshlennosti  
stroymaterialov Kostromskogo sovnarkhoza.  
(Wire rope--Testing)

STUPIN, V. (Stavropol'skiy kray)

Rivers change the course of their flow. Tekh.mol. 29 no.6:8 '61.  
(MIRA 14:7)

(Rivers—Regulation)

STUPIN, YE. N.

BAGUZOV, N.P., arkhitektor; STUPIN, Ye.N., inzhener

Conference of planning organizations of the Ministry of Construction  
Work of the Metallurgical and Chemical Industries. Stroi.prom.33  
no.8:45-46 Ag'55. (MIRA 8:11)  
(Moscow---Construction industry--Congresses)

~~STUPIN, Ye. N.~~

First international conference on standard design. Stroi.prom.  
35 no.9:45-47 S '57. (MIRA 10:10)  
(Berlin--Architecture--Congresses)



VECHTOMOV, N.I., inzh.; KUDRYAVTSEV, V.A., inzh.; MALKES, D.A., inzh.;  
 OSTROVSKIY, G.I.; POVERENNIY, L.D.; SUSHKOV, P.M., inzh.;  
 TYULENEV, N.Z., inzh. Primali uchastiye: GALIYKOVA, N.S., inzh.;  
 PUTEYEVA, N.P.; IZRAYLOVICH, Ye.A., inzh.; MARCHENKO, G.A., inzh.;  
 MALYGINA, Z.S.; SOKOLOVA, Ye.A.; SOKOV, V.N., inzh.; TARASOVA,  
 S.N.; TASHAYEV, A.L., inzh.; FILIMONOV, S.V.; DRALICH, K.F., inzh.,  
 nauch. red.; NOVITCHENKO, K.M., inzh., nauchnyy red.; SIMAKOV,  
 S.N., inzh., nauchnyy red.; FAKTOROVICH, Yu.A., kand. tekhn. nauk,  
 nauchnyy red.; STUPIN, Ye.N., otv. red.; LUTOV, N.S., red.;  
 IVANOV, V.S., red.; BAGUZO, N.P., glav. red.; VOLCHEGORSKIY, M.S.,  
 zam. glav. red.; DOBRYNIN, S.N., red.; NAZAROV, I.A., red.;  
 KOLESNIKOV, S.I., red.; MEL'NIKOV, N.P., red.; SUSNIKOV, A.A., red.;  
 STAROVEROV, I.G., red.; LYTKINA, L.S., red. izd-va; GORDEYEV, P.A.,  
 red. izd-va; OSENKO, L.M., tekhn. red.

[Handbook for the designer of industrial, residential, and public  
 buildings and structures; organization of construction and execu-  
 tion of building and assembly operations. Industrial construc-  
 tion] Spravochnik proektirovshchika promyshlennykh, zhilykh i  
 obshchestvennykh zdaniy i sooruzheniy; organizatsiya stroitel'-  
 stva i proizvodstvo stroitel'no-montazhnykh rabot. Promyshlen-  
 noe stroitel'stvo. Pod red. P.M.Sushkova. Moskva, Gos.izd-vo  
 lit-ry po stroit., arkhitekt. i stroit. materialam, 1961. 372 p.  
 (MIRA 15:2)

(Industrial buildings)

STUPIN, Ye.N., inzh.

Designing a new type of industrial building. Prom. stroi. 39  
no.10:18.23 0 '61. (MIRA 14:10)

1. Direktor Gosudarstvennogo proyektnogo instituta Promstroyproyekt.  
(Industrial buildings)

STUPINA, A.G.

Rodents of the Upper Angara Valley. Kraeved. sbor. no. 6:102-108  
'61. (MIRA 15:2)  
(Upper Angara Valley—Rodentia)

STUPINA, A.S. (Khar'kov)

Morphological changes in the spinal cord in hypertension. Arkh.pat. 18  
no.7:26-28 '56. (MIRA 10:1)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. G.L.Derman)  
Khar'kovskogo meditsinskogo instituta (dir. - dotsent I.F.Kononenko)

(HYPERTENSION, pathology,  
spinal cord (Rus))  
(SPINAL CORD, pathology,  
in hypertension (Rus))

STUPINA, A.S. (Khar'kov)

Histochemistry of thiol groups in the myocardium in pulmonary-cardiac insufficiency. Arkh.pat. 24 no.5:46-51 '62. (MIRA 15:5)

1. Iz kafedry patologicheskoy anatomii (zav. - prof. G.L. Derman) Khar'kovskogo meditsinskogo instituta (rektor - dotsent B.A. Zadorozhnyy).  
(HEART--MUSCLE) (THIOLS) (HEART--VALVES--DISEASES)

STUPINA, A.S.

Changes in the vessels of the lungs in chronic nonspecific  
pneumonias. Arkh. pat. 23 no.2:59-67 '61. (MIRA 14/2)  
(PNEUMONIA) (PULMONARY ARTERY--DISEASES)

STUPINA, A.V., inzh.: TAMBERG, D.E., kand. tekhn. nauk

Justification of the architectural and structural type of a  
specialized vessel for the transportation of sand loaded and  
unloaded by hydromechanical means. Trudy LIVT no.50:23-32 '63.  
(MIRA 17:11)

STUPINA, I. D.

STUPINA, I. D.: "The properties of certain delta-S-operations." Min Education  
SSSR. Moscow State Pedagogical Institute V. I. Lenin. Moscow, 1956.  
(Dissertation for the Degree of Candidate in Physicomathematical Science.)

Knizhnaya letopis', No. 30, 1956. Moscow.



38-3-3/7

AUTHOR:

STUPINA, I.D.

TITLE:

On Some Properties of  $\Gamma$ -Operation.

PERIODICAL:

(Osnovnykh svoystvakh  $\Gamma$ -operatsii. Russian).

Izvestiya Akad. Nauk SSSR, Ser. Mat., 1957, Vol 21, Nr 3, PP 329 - 348 (U.S.S.R.)

ABSTRACT:

The present paper proves the following: The general theorem on the overlapping of quantities applies also if  $N$  is a solid basis of the  $\Gamma$ -operation, and for the case that the class  $\Xi$  here denotes a certain class of quantities) is a class of  $\Lambda_2$  quantities. This applies (in the sense of the freedom from contradiction in the axiom system of the theory of the  $\Sigma$ -quantities by K. GÖDEL (?)) to  $CA_n$  quantities.

At first the conception of the  $\Lambda$ -operation and then the conception of the  $\Gamma$ -operation is defined. Next, some lemmata and conclusions are given and proved. One of these lemmata states the following: The solid basis of the  $\Gamma$ -operation is in full and exact agreement with any class of quantities  $\Xi$ . The ideas expressed by the author lead to two theorems: One of them is the following: If the class of the quantities  $\Xi$  and the basis  $N$  are in a totally correct ratio, then  $\Phi_{N_s}(\Xi) \subset \Phi_N(\Xi)$  applies. Here  $\tilde{N}$  denotes the solid reduced basis of the  $\delta s$ -ope-

Card 1/2

STUPINA, I D

AUTHOR: STUPINA, I.D. 20-2-7/50  
TITLE: On the Properties of Some  $\delta$ s-Operations (O svoystvakh nekotorykh  $\delta$ s-Operatsiy)  
PERIODICAL: Doklady Akademii Nauk <sup>SSSR</sup>, 1957, Vol 117, Nr 2, pp 188-190 (USSR)  
ABSTRACT: The author's, Kozlova's and A.A. Lyapunov's very numerous publications on certain questions of the descriptive set theory during the last years are enriched by a further contribution. The author considers the following problem: A certain set being subject to an operation, which relations consist between the properties of the original set and those of the image set. In the present paper a series of new definitions is introduced (the other notations are due to Kozlova and Lyapunov [Ref.8, 9, 10, 11]) and 7 theorems are formulated without proof. 11 Soviet and 3 foreign references are quoted.  
PRESENTED: By P.S. Aleksandrov, Academician, 21 June 1956  
SUBMITTED: 5 June 1956  
AVAILABLE: Library of Congress

Card 1/1

STUPINA, I. D.

Separation of functions. Uch. zap. Volg. gos. ped. inst.  
no.11:159-170 '59. (MIRA 16:1)

(Aggregates)

S/044/63/000/001/003/053  
A060/A000

AUTHOR: Stupina, I.D.

TITLE: On a property of R operations

PERIODICAL: Referativnyy zhurnal, Matematika, no. 1, 1963, 13 - 14, abstract 1A91  
(Tr. 1-y Nauchn. konferentsii matem. kafedr ped. in-tov Povolzh'ya,  
1960, Kuibyshev, 1961, 101 - 105)

TEXT: The author studies R operations over tables of sets  $\{E_{n_1 \dots n_k}\}$  [for the definition of an R operation see A.A. Lyapunov's book "R-mnozhestva" (R sets), 1953]. Points of nondenumerability of a  $\delta_s$  operation  $\Phi_N\{E_i\}$  are defined as points entering in a nondenumerable set of nuclei (the nuclei corresponding to a chain  $\{i\} \in N$  is defined as the intersection of all the  $E_i$  with numbers  $i$  entering in the chain  $\{i\}$ ). Since the R operation is a special case of the  $\delta_s$  operation, the notion of a point of nondenumerability may be considered for the R operation, too. The object of the paper is to construct a  $\delta_s$  operation  $F$  such that when applied to an arbitrary table  $\{E_{n_1 \dots n_k}\}$  it yields as result the set of all points

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A060/A000

On a property of R operations

of nondenumerability of the given R operation  $R_{\mathcal{N}}$   $\{E_{n_1...n_k}\}$  (where  $\mathcal{N}$  is a given system of bases, specified by the R operation). The construction of such a  $\delta_s$  operation  $F$  makes it possible to prove the following theorem on coverings: Let  $R_{\mathcal{N}}$  be a given R operation, and the table of sets  $\{E_{n_1...n_k}\}$  from the class  $\Xi$  be such that as a result of applying the operation  $R_{\mathcal{N}}$  to that table, no points of nondenumerability turn up. Then there will exist a table of sets  $\{H_{n_1...n_k}\}$  such that  $H_{n_1...n_k} \supset E_{n_1...n_k}$ ,  $H_{n_1...n_k} \in B(\Xi)$ , where the result of applying the operation  $R_{\mathcal{N}}$  to the table  $\{H_{n_1...n_k}\}$  also has no points of nondenumerability. Here  $B(\Xi)$  is the maximal Borel field entering in  $\Xi$ .

Yu.S. Ochan

[Abstracter's note: Complete translation]

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STUPINA, I.D.

One property of an R-operation. Sib. mat. zhur. 5 no.5:1125-1151  
S-O 1(4. (MIRA 17:11)

STUPINA, I.D. (Volgograd)

Range sets in a Baer space. Volzh. mat. sbor. no.1:172-187 '63.  
(MIRA 19:1)

ACC NR: AT6034059

(A)

SOURCE CODE: UR/0000/66/000/000/0354/0356

AUTHOR: Nagornaya, Yu. F.; Serenkov, V. I.; Stupina, L. P.

ORG: State Scientific Research Institute of Plastics (Gosudarstvennyy nauchno-issledovatel'skiy institut plasticheskikh mass)

TITLE: Investigation of the effect of the nature of metallic fillers on the radiolysis of polymeric materials

SOURCE: Simpozium po radiatsionnoy khimii polimerov. Moscow, 1964. Radiatsionnaya khimiya polimerov (Radiation chemistry of polymers); doklady simpoziuma. Moscow, Izd-vo Nauka, 1966, 354-356

TOPIC TAGS: gamma irradiation, polyethylene plastic, radiation chemistry, iron powder, plastic filler

ABSTRACT: The effect of radiation on polymer-filler systems was studied in this mass spectral examination of the radiolysis products of high pressure polyethylene P-500 and of filled polyethylene (3:1 polymer:filler). Copper, lead, nickel and two grades of iron powders were used as fillers. The samples under  $10^{-5}$  mm Hg pressure were subjected to 100 Mrad dosage from a cobalt-60 source at room temperature. Gas evolution from irradiated filled samples was greater than from the polymer alone; the iron powder Fe<sub>100</sub> with larger surface area had a greater effect than the other iron

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STUPINA, N.M.

Forest pests of Western Siberia. Priroda 44 no.9:103-104 S '55.  
(MLRA 8:11)

1. Institut geografii Akademii nauk SSSR  
(Siberia, Western--Trees--Diseases and pests)

AUTHOR: Gorbunova, M.N., Liliyenberg, D.A. 10-58-2-26/30

TITLE: The 4th Conference of Young Scientists of the Institute of Geography of the USSR Academy of Sciences (IV Konferentsiya molodykh nauchnykh rabotnikov instituta geografii AN SSSR)

PERIODICAL: Izvestiya Akademii nauk SSSR - Seriya geograficheskaya, 1958, Nr 2, pp 151-153 (USSR)

ABSTRACT: In 1957, the 4th regular Conference of Young Scientists of the Institute of Geography of the USSR Academy of Sciences was convened. The conference heard the following reports: S.S. Savina and Yu.I. Spiridonova on the climatology and meteorology of the European part of the USSR; L.I. Mukhina on the natural division into districts of the Vitim plateau; N.M. Stupina on the reasons for the destruction of forests in western Siberia; A.A. Velichko on the physical-geographical conditions of the upper paleolithic period in the basin of the central Desna; V.S. Zaletayev on birds of the Mangyshlak peninsula; Z.S. Chernyshova on the linear profiles of rivers of the Trans-Volga area in connection with new tectonic movements; D.A. Liliyenberg on special features in the relief and new tectonics of Kabyntan; K.N. Argasova on the structure of the valley and bed of the Zhanadar'ya, A.D. Armand on problems concerning the

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